

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-13, 15, 17-45, 48-60, 62-103, and 105-149 will be pending. By this amendment, claims 10, 42, 58, 71, 75, 101, 108, 114, 118 and 144-149 have been amended. No new matter has been added.

§102 Rejection of Claims 1-9, 11-13, 15, 17-20, 22-41, 43-45, 48-60, 62-70, 72-103, 105-113, and 115-145

In Section 3 of the Office Action, claims 1-9, 11-13 15, 17-20, 22-41, 43-45, 48-60, 62-70, 72-103, 105-113, and 115-145 stand rejected under 35 U.S.C. §102(b) as being anticipated by Jeffers *et al.* (U.S. Patent No. 4,739,510; hereinafter referred to as “Jeffers”).

In the Background section of the Specification, it was stated that “in radio broadcasting, if a program is a program of songs, the program is broadcast (transmitted) as a broadcast signal.” *Background of the Specification, page 1, lines 14-15.* “Data which does not comprise sounds other than those of songs . . . may be said to be related to the broadcast signal, and may therefore be described as related data.” *Background of the Specification, page 1, line 19 to page 2, line 2.*

“In visual radio broadcasting . . . additional information broadcast in the form of data is included in the broadcast signal in addition to the broadcast signal which constitutes the actual program (referred to hereafter as ‘actual broadcast’). The additional information transmitted in the form of data contains the song title and the singer’s name, so the user can confirm the song title and singer’s name by looking at this additional information.” *Background of the Specification, page 2, lines 16-23.*

“However, if the user overlooks it or does not make a note of it, the user may no longer be able to identify the relation between the additional information transmitted in visual

broadcasting to the broadcast itself.” *Background of the Specification, page 2, line 24 to page 3, line 3 (emphasis added).*

To address the above-described problems of a user not being able to identify the relation between the additional information transmitted in visual broadcasting to the broadcast itself, the present method includes a transmitting step which transmits the broadcast signal and transmits the additional information on plural occasions during the transmission of the broadcast signal.

Claim 1 is a method claim for transmitting a predetermined broadcast signal together with predetermined additional information. The steps of method claim 1, as amended and presented herein, include:

constructing said additional information in which acquiring information necessary to acquire related data related to said broadcast signal and a second signal are disposed, wherein said broadcast signal is a signal in which said second signal is also superimposed on a first signal; and

transmitting said broadcast signal, and transmitting said additional information, in which said acquiring information concerning said related data related to this broadcast signal is disposed, on plural occasions during the transmission of said broadcast signal.

(emphasis added)

In summary, claim 1 comprises: (1) constructing additional information, which includes acquiring information (for acquiring data related to a broadcast signal) and a second signal; (2) transmitting the broadcast signal, which is a signal having the second signal also superimposed on a first signal; and (3) transmitting the additional information on plural occasions during the transmission of the broadcast signal. In other words, the transmitting method comprises a step of transmitting a broadcast signal produced by superimposing a second signal on a first signal *and* transmitting additional information including acquiring information and said second signal. That is, two second signals are transmitted concurrently. For example, the second signal is a noise signal. When a receiver receives the broadcast signal and the additional information, the receiver

can extract the second signal from the additional information and subtract the second signal from the broadcast signal. Thus, the receiver can obtain an original broadcast signal (the first signal).

See Specification, Fig. 13.

By contrast, Jeffers can only transmit the encrypted digital audio bits using the horizontal blanking intervals of the broadcast signal. Therefore, Jeffers does not disclose or teach having the additional information include a second signal, and also having the broadcast signal include said second signal, wherein said second signals are transmitted concurrently.

Based on the foregoing discussion, it is maintained that Jeffers fails to teach or suggest all the limitations of claim 1, including: “*constructing said additional information in which acquiring information necessary to acquire related data related to said broadcast signal and a second signal are disposed, wherein said broadcast signal is a signal in which said second signal is also superimposed on a first signal; and *transmitting said broadcast signal*, and *transmitting said additional information*, in which said acquiring information concerning said related data related to this broadcast signal is disposed, on plural occasions during the transmission of said broadcast signal.” Therefore, claim 1 should be allowable over Jeffers.*

Furthermore, since independent claims 34, 144 and 145 closely parallel, and include substantially similar limitations as, independent claim 1, claims 34, 144 and 145 should also be allowable over Jeffers. Since claims 2-9, 11-13 15, 17-20, 22-33, 35-41, 43-45, and 48-57 depend from one of claims 1 and 34, claims 2-9, 11-13 15, 17-20, 22-33, 35-41, 43-45, and 48-57 should also be allowable over Jeffers.

Claim 58, as amended herein, is a method claim for receiving a predetermined broadcast signal and predetermined additional information in which acquiring information necessary to acquire related data related to this broadcast signal is disposed.

The steps of method claim 58, as presented herein, include:

receiving said broadcast signal and said additional information;

temporarily storing said received additional information into a temporary storage; and

storing said acquiring information disposed in said additional information temporarily stored in said temporary storage into a main storage when there is a user input from an operation unit.

(emphasis added)

By contrast, although it is indicated that Jeffers discloses the temporary storage in its processing circuits and the main storage in its decoder memory, the portion of Jeffers cited in the Office Action (Jeffers, col. 14, lines 14-47) fails to disclose the step of “storing the acquiring information disposed in the additional information temporarily stored in the temporal storage into the main storage when there is a user input from an operation unit.”

Based on the foregoing discussion, it is maintained that Jeffers fails to teach or suggest all the limitations of claim 58. Therefore, claim 58 should be allowable over Jeffers. Furthermore, since independent claims 101, 144 and 145, as amended herein, closely parallel and include substantially similar limitations as, independent claim 58, claims 101, 144 and 145 should also be allowable over Jeffers. Since claims 59-60, 62-70, 72-100, 102-103, 105-113, and 115-143 depend from one of claims 58 and 101, claims 59-60, 62-70, 72-100, 102-103, 105-113, and 115-143 should also be allowable over Jeffers.

Accordingly, it is submitted that the rejection of claims 1-9, 11-13 15, 17-20, 22-41, 43-45, 48-60, 62-70, 72-100, 102-103, 105-113, and 115-145 based upon 35 U.S.C. §102(b) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 10, 42, 71, 114, and 146-149

In Section 5 of the Office Action, claims 10, 42, 71, 114, and 146-149 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jeffers.

Based on the foregoing discussion regarding claims 1, 34, 58, and 101, and since claims 10, 42, 71, and 114 depend from claims 1, 34, 58, and 101, respectively, claims 10, 42, 71, and 114 should be allowable over Jeffers. Since independent claims 148 and 149, as amended herein, closely parallel, and include substantially similar limitations as, independent claims 58 and 101, claims 148 and 149 should also be allowable over Jeffers.

The steps of transmitting method claim 146 includes:

constructing predetermined additional information which includes acquiring information necessary to acquire data related to a predetermined broadcast signal; and

transmitting said predetermined broadcast signal;

transmitting said predetermined additional information on plural occasions during the transmission of said predetermined broadcast signal,

wherein said related data is a computer program when said broadcast signal is video data or audio data obtained by executing said computer program.

(emphasis added)

In summary, claim 146 comprises: (1) constructing additional information, which includes acquiring information for acquiring data related to a broadcast signal; (2) transmitting the broadcast signal; and (3) transmitting the additional information on plural occasions during the transmission of the broadcast signal, wherein said related data is a computer program when said broadcast signal (audio/video signals) is obtained by executing said computer program. As an example, “related data” as described in claim 146 may be game software, as described in the Specification. *Specification, page 63, lines 10-17.* In this example, the related data is game

software when a broadcast signal is a game software scenario obtained by executing said game software. That is, it is easy for a user to obtain a computer program (game software) whose game software scenario appears interesting to the user during a television broadcast.

Specification, page 63, lines 15-17.

By contrast, although it is indicated that Jeffers includes a header having group address, sync information, and information relating to the program, the header in Jeffers fails to teach or suggest the claimed transmitting method “wherein said related data is a computer program when said broadcast signal is video data or audio data obtained by executing said computer program.”

Based on the foregoing discussion, it is maintained that Jeffers fails to teach or suggest all the limitations of claim 146. Therefore, claim 146 should be allowable over Jeffers.

Furthermore, since independent claims 147, 148 and 149 closely parallel, and include substantially similar limitations as, independent claim 146, claims 147-149 should also be allowable over Jeffers.

Accordingly, it is submitted that the rejection of claims 10, 42, 71, 114, and 146-149 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Allowable Subject Matter of Claim 21

It is appreciatively noted that claim 21 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

In view of the foregoing, entry of this amendment and the allowance of this application with claims 1-13, 15, 17-45, 48-60, 62-103, and 105-149 are respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as Originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes that have been made to these claims were not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes were made simply for clarification and to round out the scope of protection to which Applicant is entitled.

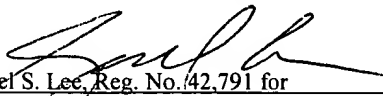
In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicant's representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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